

## **REMARKS**

### **Status of the Application**

Claims 1, 2 and 4-14 are all the claims pending in the application. Claims 2, 9-12 and 14 are rejected under 35 U.S.C. § 102(e) as being anticipated by Jairazbhoy et al. (US Publication 2002/0000331 A1). Claims 1 and 5-8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Soga et al. (US Publication 2006/0061974 A1) as evidenced by Jochym. Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Soga et al. (US Publication 2006/0061974 A1) as applied to claim 1, and further in view of Jairazbhoy et al. (US Publication 2002/0000331 A1). Claim 13 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jairazbhoy et al. (US Publication 2002/0000331 A1) as applied to claim 2, and further in view of Soga et al. (US Publication 2006/0061974 A1).

### **Claim Rejections - 35 U.S.C. § 102**

*Claims 2, 9-12 and 14 are rejected under 35 U.S.C. § 102(e) as being anticipated by Jairazbhoy et al. (US Publication 2002/0000331 A1).*

Claim 2 recites, in part, “disposing a second plurality of metal bonding film shapes in a pattern on a bonded element.” The Examiner continues to allege that the placement of element 90 of Jairazbhoy corresponds to disposing a second plurality of metal bonding film shapes in a pattern on a bonded element, as recited in claim 2. Applicant respectfully disagree.

The Examiner fails to address the arguments presented with regard to claim 2 in the Amendment filed October 31, 2005. Specifically, the Examiner has failed to respond with any specificity to the argument that element 99 in Jairazbhoy is merely a solder joint created *after* the

component is disposed atop the bumps 16. Thus, as noted on page 6 of the Amendment, element 99 cannot be considered to be in a pattern *on a bonded element*. MPEP §707.07(f) requires that the Examiner respond to the substance of Applicants' arguments. Thus, claim 2 should be patentable over the applied art as this argument remains un rebutted, since the Examiner fails to make *any* mention of Applicant's argument in the Amendment filed October 31, 2005.

Claims 9-12 and 14 are patentable at least by virtue of their dependency from claim 2.

**Claim Rejections- 35 U.S.C. § 103**

*Claims 1 and 5-8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Soga et al. (US Publication 2006/0061974 A1) as evidenced by Jochym.*

With respect of claim 1, the Examiner alleges that Soga teaches all elements of claim 1. On page 3 of the detailed action, the Examiner alleges that Soga discloses a metal bonding film (solder bump 18) on a substrate (13) and a bonded element (14, W-Cu plating) above the plurality of the bonding films. Applicants disagree with the Examiner's rejection. In FIG 3 of Soga discloses the W-Cu plating (14) is directly formed on the substrate (13) and in Fig 7(a) of Soga discloses solder bumps (18) is disposed between Si substrate (29) and Si chip (8). Thus, Soga does not disclose solder bump (18) is disposed between the substrate (13) and the W-Cu plating (14).

Therefore, claim 1 is patentable over the applied art.

*Claim 4 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Soga et al. (US Publication 2006/0061974 A1) as applied to claim 1, and further in view of Jairazabhoj et al. (US Publication 2002/0000331 A1).*

Claim 4 are dependent from claim 1. Because Soga fails to disclose all of the elements of claim 1, and because Jairazbhoy fails to cure the deficient disclosure of Soga, claim 4 is dependent at least by virtue of its dependency.

*Claim 13 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Jairazbhoy et al. (US Publication 2002/0000331 A1) as applied to claim 2, and further in view of Soga et al. (US Publication 2006/0061974 A1).*

Claim 13 is dependent from claim 2. Because Jairazbhoy fails to disclose all of the elements of claim 1, and because Soga fails to cure the deficient disclosure of Jairazbhoy, claim 13 should be patentable over the applied art.

**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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